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BANS ON SMOKING IN VEHICLES CARRYING CHILDREN

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You asked for a description of laws in other states banning smoking in vehicles when children are present. You also wanted to know if there is any data on the effects of such laws. This report updates OLR Report [2009-R-0220](#).

SUMMARY

Arkansas, California, Louisiana, Maine, and the Commonwealth of Puerto Rico have each enacted such legislation. The maximum age of children covered varies from 13 to 18. Fines range from \$25 in Arkansas to a maximum of \$250 in Puerto Rico (for a first offender).

According to the advocacy group Global Advisors for Smokefree Policy, legislation banning smoking in cars with children has been proposed in 21 states, including Connecticut. In addition, the National Center for Chronic Disease Prevention and Health Promotion (national center), a division of the national Centers for Disease Control (CDC), reports that six states and the District of Columbia restrict smoking in vehicles carrying children in the care of childcare facilities. We have attached the center's list of state restrictions on smoking in motor vehicles in effect as of June 30, 2012.

We were unable to find any studies that specifically address the effectiveness of banning smoking in vehicles. However, the Community Preventive Services Task Force, an independent board of experts appointed by the CDC director, strongly recommends smoking bans and restrictions “on the basis of strong scientific evidence that they reduce exposure” to second-hand smoke (<http://www.thecommunityguide.org/tobacco/Tobacco.pdf>). In addition, a number of studies have noted the dangers of second-hand smoke in general, and of second-hand smoke in vehicles in particular.

“Second-hand smoke exposure is associated with acute respiratory infections, middle ear disease, delayed lung growth, and more severe asthma,” a 2012 study noted. “Nonsmoking youth are...particularly vulnerable to second-hand smoke due to their limited ability to avoid smoke-permitted environments, higher breathing rates, and the developing nature of their respiratory, immune, and nervous systems.”

Researchers say that second-hand smoke can be particularly hazardous in the relatively confined space of a car. Opening car windows or vents can reduce, but not eliminate, the danger. A 2011 research paper that monitored car trips involving smokers found that the concentration of fine particulate matter in cars where smoking occurred greatly exceeded international indoor air quality standards and posed a health threat to children. Similarly, the national center states that smoking just one cigarette in a vehicle with the windows closed can generate more than 100 times the U.S. Environmental Protection Agency’s (EPA) 24-hour recommended exposure limit to fine particles. These particles, about 1/30th the width of an average human hair, contain cancer-causing chemicals, and can lodge deep in a person’s lungs, irritating the respiratory system.

A *Pediatrics* study whose results were published online in February 2012, found that “despite a significant decrease in second-hand smoke exposure in cars among non-smoking U.S. middle and high school students between the years of 2000 and 2009, that in 2009, more than one-fifth of these students were still exposed to second-hand smoke in a car in the previous seven days.”
<http://www.tobaccofreekids.org/research/factsheets/pdf/0334.pdf>.

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Arkansas

The law (Ark. Rev. Code § 20-27-1903) bars smoking in motor vehicles carrying children under age 14. A violator may be fined \$25, but first offenders can avoid paying the fine by showing proof they are taking part in a smoking-cessation program. The law does not apply to buses (including school buses) and other public conveyances legally required to have passenger restraint systems.

California

The law (Cal. Health and Safety Code § 118947 *et seq.*) bars smoking in a motor vehicle, whether moving or stopped, when a minor (under age 18) is present. A violation is punishable by a fine of up to \$100. A law enforcement officer cannot stop a vehicle solely to determine whether a driver is violating this law.

Louisiana

The law (La. Rev. Stat. § 32:300.4) bars smoking in a motor vehicle where there is a child (under age 13) in a child safety or booster seat, or wearing a seat belt, regardless of whether the windows are open or closed. The law applies to cars, passenger vans, and pick-up trucks. Violators are subject to a fine of up to \$150 or, at the judge's discretion, at least 24 hours of community service. Violation of this provision is considered a primary offense, which means a law enforcement officer may stop a motor vehicle solely because of a violation. But the officer may not search or inspect a motor vehicle, its contents, the driver, or a passenger solely because of a violation of this provision. A violation is a nonmoving violation, and a citation issued by an officer cannot be included on the driver's operating record.

Maine

The law (22 Me. Rev. Stat. Ann. § 1549) bars smoking in a motor vehicle by an operator or a passenger when a child under 16 is present, regardless of whether the windows are open or closed. Violators are subject to a \$50 fine, although a law enforcement officer may instead issue a warning. An officer may not inspect a motor vehicle, its contents, its driver, or a passenger solely because of a violation of this provision. A violation is a nonmoving violation.

Puerto Rico

The law (PR Laws Ann. 24 § 892(u)) bars smoking in a private transportation vehicle in which there is a child under age 13 or in a car seat. Violators face a maximum \$250 fine for a first offense (PR Laws Ann. 24 § 898).

EFFECTS OF SECOND-HAND SMOKE ON CHILDREN IN CARS

A 2011 research paper published in *Tobacco Control* on children's potential exposure to second-hand smoke in cars (attached) examined smoking levels during a number of car trips averaging about 27 minutes long. Researchers found that the concentration of smoke particles where smoking took place greatly exceeded international indoor air quality standards. Despite the fact that drivers opened windows and vents during the trips, "exposure intensities...remained considerable and taken as an average were about three times the [World Health Organization] guidance concentration. Exposure to [fine particulate matter] at the levels reported here is likely to be harmful to respiratory health."

According to the national center, smoking in vehicles is particularly detrimental to the health of children and nonsmoking adults because it quickly generates high concentrations of second-hand smoke in the relatively small space. "In fact," the national center says in this fact sheet (http://www.njgasp.org/STATE_SHS_Vehicles_Fact_Sheet_6-2012.pdf) "several studies found smoking just one cigarette in a vehicle with the windows closed can generate more than 100 times the EPA's 24-hour recommended exposure limit to fine particles."

With vehicle windows and vents closed, the center says, exposure to second-hand smoke "exceeds the levels of these particles found in smoky bars and restaurants." Smoking with the vehicle windows closed can also produce a significant increase in carbon monoxide...that can harm children even in small quantities."

Even with a vehicle' windows or vents open, it says, particles levels are at twice the EPA's 24-hour recommended exposure limit.

A 2012 study published in "*Pediatrics*" (attached) reported that "despite a significant decrease in second-hand smoke exposure in cars among non-smoking US middle and high school students between the years of 2000 and 2009, that in 2009, more than one-fifth of these students were still exposed to second-hand smoke in a car in the previous seven days."

“The implications of these findings are twofold,” the report said “considerable progress has been made over the past decade in uniformly reducing second-hand smoke exposure in cars among US middle and high school students; however, enhanced and sustained efforts are needed to further reduce second-hand smoke exposure in this environment.”

“The implementation of a smoke-free motor vehicle policy represents the most effective way to protect youth from second-hand smoke exposure in this environment.”

<http://www.tobaccofreekids.org/research/factsheets/pdf/0334.pdf>

ADDITIONAL INFORMATION

For more information, see “*Kids, Cars, and Cigarettes*,” published by the Public Health Law Center at the William Mitchell College of Law, available on line at:

http://publichealthlawcenter.org/sites/default/files/resources/phlc-policybrief-kidscarssmoke-2010_0.pdf and the American Lung Association website at <http://www.lungusa2.org/cessation2/>